

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Tom Bowman <tbowman@nbn.net>
Subject: [9833] "QRP Power"
Message-ID: <199606131448.KAA17826@users.nbn.net>

Just an FYI: I checked with the League this morning on the availability of the new book, "QRP Power," described in an earlier post here as the replacement for "QRP Classics."

League publication folks say QRP Power will not be available earlier than the end of the summer, not before Field Day as hoped.

I'm looking forward to the article in the new book on optimizing NN1G rigs. Anyone see the article, know what's included???

Tom Bowman, WA3REY, tbowman@nbn.net Mount Gretna, PA

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: ALK0FRP@aol.com
Subject: [9816] 20m dx
Message-ID: <960613011829_555255674@emout18.mail.aol.com>

Hi All
Watched the big celebration for the Colorado Avalanche (Stanley Cup), then tuned
20m. It was good tonite. I started on 14060 and called CQ with no takers moved to 14035 and snagged an OH7 and a UA6, then KC7DQV, AZ, called off the back of the beam. Then ZL2JK called, went to a half watt, still good copy. But a V beam on his end and a 4el mono on my end helps. Then ZL1CH called me. Good nite on 20M, no new ones but its always fun when condx are good. Hope all this hold for Field Day weekend. Hope 6m hold out.

73/72

Al K0FRP

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: ae4ic@nr.infi.net (BOB KELLOGG)

Subject: [9831] 30 meter beacon
Message-ID: <199606131425.KAA23575@mh004.infi.net>

Gang, listen for W3RG0's beacon this morning at about 10.135. He's running 750 mW from Cary, North Carolina.

CUL,
Bob Kellogg, AE4IC
Prolably, but not nececelery. - Benny Hill

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: ae4ic@nr.infi.net (BOB KELLOGG)
Subject: [9849] 30 Meter Beacon Correction
Message-ID: <199606132240.SAA26503@mh004.infi.net>

Gang the 30 meter QRP beacon at 10.135 was W3RGQ, not W3RG0. sorry.

CUL,
Bob Kellogg, AE4IC
Prolably, but not nececelery. - Benny Hill

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: n5zgt@swcp.com (Brian Mileschosky)
Subject: [9847] 49'er Contest Thoughts...
Message-ID: <199606132049.0AA17016@kitsune.swcp.com>

Hello Everybody,

The contest for the 49'ers sounds great! I thought of some exchanges we can send, for both those using 49'ers as well as those who are in the contest using other types of QRP rigs. I'm sure others have thought of some as well, but here are mine:

- When you make contact, send RST, Serial # (Number of contacts made so far) and a special character signifying (sp?) what rig you are using.

Example: 599 001 F

- Characters

- F = NorCal 49'er
- M = MFJ
- H = Heath
- T = Ten Tec
- HB= Homebrew
- O = Other kinds of QRP kits, etc.

I think this is a neat exchange, but others might have a better one. The only way to find out is to make something up and let everybody know!

Looking foward to the contest.

72,

Brian, N5ZGT

Boy Scouts of America
JASM -Troop 41
Albuquerque, N.M.
O.A. Lodge 66 <-W-W-W-<<

Amateur Radio - N5ZGT
ARRL QRP: NorCal# 1700
Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
Internet: n5zgt@swcp.com

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996

From: DLShips@aol.com

Subject: [9868] 49er Packaging - Still searching for a solution ?

Message-ID: <960613235743_555975231@emout07.mail.aol.com>

For those still searching for the right box for their 49er, I offer the following:

I recently built the 49er for a friend and found the Radio Shack (little blue box 4.4 x 2.44 x .06 RS 270-221 for \$2.29) to be a good size to hold the board, battery, power switch and phone jack. I used brass screws with washers and butterfly nuts for the antenna connector. A key can be easily fabricated from a 4" x 1/2" of flexible metal and a coat button, and attached to the cover. The whole package, including a stranded hookup wire antenna can be slipped into a camera case or your pocket.

A small piece of plastic insulation (about 1 1/4 ") from size 12 solid electrical house wire slips snugly over the shaft of C6 and can be routed through a 1/8" hole in the cover. No knob is needed.

Hope this is helpful..

72's de W3RDF/qrpp

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Stanley Wilson <microres@crl.com>
Subject: [9861] Building a NW8020 kit for 30 meters
Message-ID: <Pine.SUN.3.91.960613180212.26763A-100000@crl2.crl.com>

First I should say that I build a lot of QRP type rigs(things), but have not built a kit for several years. I like to obtain a PC board and create my version of whatever. I chose the NW8020 over other similiar kits based on the schematic. It has greater gain in the overall receiver section than most of the available kits. While a PC board was available from Dan's, that version is not the latest design and did not have the variable bandpass tuning. W6EMT only sells kits and not parts such as a PC board. So I ordered a kit for 30 meters directly from Roy. Price with shipping was \$80.

It arrived within a week. Good service. It had a high quality silk screened board with full solder mask. The parts were high quality (Mouser/Digi-Key type). Excellent instructions. In addition Roy had package the kit up into various stages. VFO, RIT, etc. One of the kits was for the band selected and contained parts used in the other packages. Once each stage was built it was tested. There are four coils you have to wind and that is where you start. Do what you do not like first. hi

The kit contained enamel wire which is normal. I pitched this and used my nylon coated wire. Turn the soldering iron up to 800 degrees and it is easy to tin. Also I like green, red and gold coil wire. Makes it nice for those coils with one or more windings. I purchased about \$40 worth of wire 5 or 6 years ago and still using it. Takes a long time to use a 1/2 lb of wire. I wind my coils tight and then boil them for 5 minutes. My VFO came out almost 300 khz high so I had to add 2 turns. The VFO proved to be extremely stable. From start up it drifted less than 1 khz in 4 hours. With most of the drift the first 15 minutes. The 30 meter version uses a 1.9 mhz vfo frequency. So the 30 mtr model is super stable.

I did not obtain the audio filter (\$20) since I already had one to put in the unit. I did want AGC plus a S-meter circuit. SO I used the post for the audio filter to mount my AGC board which is a copy of G3TXQ's circuit from SPRAT 80 (which is a copy of the Atlas 180). This circuit takes off in front of the audio amplifier so you can set it and still change the audio level without changing the AGC level.

I promised myself I would not modify Roy circuit when I started. However, I did modify the output audio stage. I added the 82 mh and 047 circuit from the 49er in front of the xmit mute circuit. In addition, I changed the output capacitor from 220 uf to 47 uf. A 4.7 ohm resistor was added in series with the speaker and a 22 uf cap placed across the speaker. I had written this mod up in the local QRP newsletter and K5BDZ

picked it up in the latest QRPP. That peaks up the audio stage for 700 hz so with the 49er mod you have a real nice 700 hz output stage.

What didn't I like..... I do not like open frame variable resistors PC mount. The NW8020 contains three of them. It is a cost factor. But I went to my junk box and was able to sub nice Bourns sealed pots. The values are 500 ohm, 50 k ohm and 1M ohm.

I have just finished the unit. I am really pleased. First the design is excellent and I normally find something wrong with everyone circuit. The quality is very high. The cost is reasonable. What is missing ? You have to furnish a case (RS recommend), knobs and jacks. The kit comes with the variable resistor (VBT, RIT, Audio) s and heat sinks. I added a CB S-meter. The circuit has VBT, RIT, sidetone, lots of audio, 5 watts RF output and has a 8:1 variable cap for tuning. I am going to add a keyer and I will have an excellent QRP rig for 30 meters with a HOT receiver and full QRP power.

Roy quickly answered my questions via e-mail. He will also fix the kit for you if it does not work due to something you did incorrectly. hi At very low price.

So if you want a easy kit and want to create your own case design this may be the one for you.

It you want additional info Roy will mail you a flyer (roygregson@aol.com), but the best info is in QRPP Sept 94.

Hope to work some of DX with it this summer on 30 meters.

de stan AK0B

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: wa5whn@ix.netcom.com (Jay Miller)
Subject: [9827] CW/Field Day/Finally Rain/Sporadic E
Message-ID: <199606131311.GAA00154@dfw-ix12.ix.netcom.com>

Dear Fellow QRP Enthusists,

This "keep the code, don't keep the code" argument has some interesting ramifications. Does AT & T become AT ? How about IT & T as IT ? Interesting side bar, at one time, IT & T used to own the bakeries that had brought us "Hostess Twinkies", so we used to refer to IT & T

as International Telephone & Twinkies ;) It (CW) is a digital mode, that is as old as the Combustion Engine, in the automobile. Last time that I had checked, the Combustion Engine was still being improved upon, except in California, where they have mandated electric autos by the turn of the century. Hey, 2 things had come out of Berkley in the 60's, LSD & Unix, do You actually think they were accidents ?

Finally, some monsoon rain in New Mexico. Hopefully, high in the Southern Rockies, next weekend (ARRL Field Day), You will hear WA5WHN/QRP, if the forest fire danger subsides. Just a reminder, this is a "warm up" (pun intended) for the New England "QRP AField", Sept. 21st.

There is an untapped QRP Group out there on VHF/UHF. Pick up a copy of the "CQ VHF Ham Radio Above 50 MHz". Let's not forget those People. As an avid 6 & 10 meter Sporadic "E" Fan, both bands have been open every day to some place, geographically 400+ miles away from me. Still, no activity on 28.060 MHz.

With the Group purchase of the new OHR 100 kits for 17 meters, does this mean a repeat performance of the TMPs, except for 17 meters in the future ?

Keep the rain a comin'...Jay, WA5WHN

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: rnygren@epix.net (Bob Nygren)
Subject: [9844] Field Day Hints
Message-ID: <Chameleon.960613182604.rnygren@epix.net>

Hi Gang,

After many years of operating Field Day with the local club, my bro' Dave, KE3OA, and I will be trying our first QRP F D. The batteries are pretty much charged and the plans set. We'll be about 5 air miles from the club site, so I don't think interference will be a problem. I've read the exploits of the better known groups. My question is: Does anyone have any advice/hints/kinks which will help make this first QRP field day pleasurable.

Any thoughts are appreciated!

73, Bob WA3YON <rnygren@epix.net> ** KE3OA 1B EPA **

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [9825] FS: Heath HW-8 with HWA-7(?) power supply
Message-ID: <Pine.3.89.9606130758.B21493-0100000@w3eax.umd.edu>

The radio is in excellent, unmodified ELECTRICAL condition and works perfectly on all specified bands (80, 40, 20, 15 meters) except that the tuning dial is consistently 20 kHz high (but it's consistent, and I haven't tried to reset it yet).

Puts out full rated power, receiver sounds very good. Very Direct conversion-esque...the radio was recently gone over by RT0 Electronics.

The power supply is slightly scratched. The rig, physically...well...

Front left of top case has what looks like a bleach spot
Case has some small scratches
21 MHz band button (just the button) is missing

The radio is otherwise unmodified and in great condition.

Radio and power supply (4 bands!) - asking \$140.

* Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 80-10/6/2/440 *
*** 6m 64 grids worked on 8 watts ** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC ** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w * 145.490- 147.225+ PL 156.7 *

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: krellic@gnn.com (Curt Krellic)
Subject: [9863] FS: OHR 400 Agn
Message-ID: <199606140256.WAA18120@mail-e2b-service.gnn.com>

Hello All;

Well I obviously over priced the OHR400 Stn the first time, so I'll try Again!

For Sale, One Very Mint OHR400 with built in keyer with latest Mods and includes
the S&S Engineering PC1 Counter. Price shipped \$325 lower 48.

krelic@gnn.com or 412-693-9890

Thanks All,

Curt Ka3ivb

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [9864] FS: Radio Shack 1.3 GHz handheld frequency counter
Message-ID: <Pine.3.89.9606132107.A23412-0100000@w3eax.umd.edu>

Like new, in box with manual, original packaging, receipt for \$104 and extendable antenna. Unit takes 4-AA Alkaline OR NiCd batteries, and will charge NiCds.

LCD display with backlight on demand. Will handle hi-Z input as well.

Sells new for \$99 plus, asking \$75. Great for aligning QRP rigs...

I have two, and am selling the nicer one as "mine" is well-broken in.

* Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 80-10/6/2/440 *
*** 6m 64 grids worked on 8 watts ** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC ** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w * 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9818] Fwd: SEC Solar cycle predictions (fwd)
Message-ID: <Pine.SOL.3.91.960613070119.2747A-100000@utkux4.utcc.utk.edu>

Thought this might be of interest.

-73-

LB, W4RNL

Forwarded message:

From: albraun@socketis.net
Sender: owner-dx@ve7tcp.ampr.org
Reply-to: albraun@socketis.net

To: dx@ve7tcp.ampr.org, prop@digimark.net
From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Dave.Ackrill@WESTWOOD45.powergen.co.uk
Subject: [9832] Inductance Calculation?
Message-ID: <960613142850Z*/G=Dave/S=Ackrill/O=WESTWOOD45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB/@MHS>

I wonder if anyone out there can help please?

I'm trying to make a crystal oscillator for 72 kHz and 74 kHz.
(Someone has given me a couple of crystals on these frequencies) and I
need to make a tuned circuit for the collector of the BYF51
transistor.

I have calculated that I need 100uH for 47000pF (parallel tuned) and I
have a 47000pF in the junk box. Now, calculating for an air cored
inductor, even on a standard British toilet roll centre (1 20/32 inch
diameter and 4.5 inches long) this means about 93 turns of wire.
Possible, but a bit cumbersome to balance on the PCB!

I was wondering if anyone had any rule of thumb formula for winding
coils on ferrite rod? I have a variety of these, taken from old
transistor radios, of between 6/16 inch and 12/16 inch diameter and
about 4 to 5.5 inches long (I normally work in mm and metres but for
those who don't use these measurements I've converted them to the old
system).

Also, I have some ferrite rings, the ones that are usually used for
TVI/EMI suppression. Any info on calculating inductance for LF on
these appreciated.

Finally, does anyone have any data on powder core rings at LF? All
the data I have, for instance from "Solid State Design For The Radio
Amateur", only goes down to 500kHz. Anyone got info on what cores to
use at about 73kHz please?

Thanks very much anyway. then all I need is the Notice of Variation
from RSGB and I can start transmitting! Ah, well the wait has meant
time to build the RX and TX ;-|

72 de Dave (G0DJA)

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Peter Simpson/US/3Com <Peter_Simpson@3mail.3Com.COM>
Subject: [9819] Installing ground rods

Message-ID: <9606131138.AA0012@hqsmtp.ops.3com.com>

They're putting a second cellular system on the tower down the street from me and this past weekend, the "grounding team" started work. I was watching one of the guys put in an 8 foot ground rod. He didn't drive it vertically (which I think was just because it was easier to put it in at an angle...he didn't need to stand on a ladder), but he was using a power hammer drill to push it in. He had some kind of driver tip on the power tool, and the short, rapid, repetitive impacts seemed to drive the rod in pretty quickly.

Your mileage may vary.

Peter, KA1AXY

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: ccashion@spdmail.spd.dsccc.com (Charles Cashion)
Subject: [9835] model airplane builders
Message-ID: <9606131507.AA21367@sun1336.spd.dsccc.com>

herr@ridgecrest.ca.us (Michael Herr) wrote >

mh> BTW, model airplane builders use CA glues
mh> in large quantities with out problems.
mh> 72
mh> Mike WA6ARA

YES! But after glueing little pieces of balsa togather,
they usually frown on heating them to the melting
point of solder.

72s, 73s, whatever it takes,
Charles Cashion
AC5GT
--

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: pelt@vt.edu (Randy Pelt)
Subject: [9821] Need a BIG Favor
Message-ID: <v01540b01ade577e06af9@[198.82.152.40]>

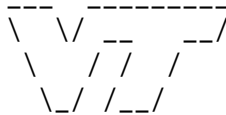
This group never ceases to amaze me!

Miracle worker Chuck Adams has come through and volunteered to let me have his extra December QRPp issue. Also, Kent Torell volunteered to let me have his.

Bruce Williams has volunteered to make a copy of the March issue. Thanks to everyone else who offered to make copies, but I won't need them now.

Ranson J. Pelt
pelt@vt.edu
QST de nz4i

Semper Fi



From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Mike J Pulley <Mike_J_Pulley@ccm.ch.intel.com>
Subject: [9853] Promote operator competence

The CW debate raging in ham-dom has overlooked an important point that we on the QRP-L list should have recognized earlier. QRP holds the key to managing spectrum crowding and promoting operator competency.

I propose the license incentive program should be based on transmit power limits and the current written exam. Limit beginners to reasonably low power levels and limited spectrum, then increase both with higher license grades.

Here's my back-of-the-envelope example:

CLASS	PWR	FREQ
=====	===	=====
Technician	10W	VHF & above
Novice	10W	some HF & some VHF/UHF
General	50W	all bands, except Adv & Extra
Advanced	500W	all bands, except Extra
Extra	1500W	all bands

Let each license class use any mode approved for amateur service they wish. Lower power will naturally encourage some to pursue more power effective modes. If CW is the most economically feasible power effective mode, we will see CW proficiency continue without federal mandates.

Power effective modes are typically also narrow band modes, thus reducing band crowding.

Meanwhile, new operators learn early how much can be accomplished with minimum power. Responsible spectrum management (and the current law) requires every operator to use the minimum necessary power to carry on communication. Currently, most operators never consider reducing power. They have no experience or expectation that communication is even feasible below 100W on HF. How often have you amazed QRO operators by covering thousands of miles with less than 5 watts? They can't imagine it's possible.

Emphasizing low power is already important to the feds. The FCC has made surprise inspections in recent years to evaluate compliance to the "minimum power" clause, so they are already leaning in this direction.

The objective of amateur license requirements is to insure reasonable entry level competency and to promote competency growth through incentives. The question is not about CW, but about competent operators. The QRP philosophy welcomes technically qualified newcomers, then encourages them toward higher skills and responsible radio spectrum use.

Regards,

-- Mike, WB4ZKA (Extra class licensee and "99.99% pure" CW op)
Phoenix, AZ
Mike_J_Pulley@ccm.hf.intel.com

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: lve1@inel.gov (Larry V East)
Subject: [9850] QRP "Afterburner"
Message-ID: <2.2.16.19960613224105.301773e8@eloi>

OK, all you guys and gals looking for a little more "umph" for your QRP rigs (the following from a recent ARRL DX Bulletin [#29 dated 6/13/96]):

GOOD THINGS IN A SMALL PACKAGE. A recent DXpedition provided important field, or perhaps more appropriately stated, island testing of a new amplifier design. The brainchild of two amateur radio operators, the amplifier uses two MRF154 power MOSFETs and requires only 12 watts drive for 1KW output. A standard airline cabin case, which is carry-on luggage size, housed the whopping 16 pounds of equipment comprised of an FT-900 transceiver, the custom amp and advanced switching power supply.

Wonder what it puts out when driven by the FT-900's full output??... :-)

No mention of who designed/built the amp.

72, Larry W1HUE/7

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [9852] QRP+ RF GAIN CONTROL MOD.
Message-ID: <199606132332.TAA110547@nss2.CC.Lehigh.EDU>

Hello Gang,

Wow, whata-reflectah, as we say here in New England, I have been away for a long weekend and got a big bunch of mail, which impressed the daylights out of the local server.

Ok, back to the mod,I had a nice chat with Tim at Index Labs.

He is mucking around with a mod.for the QRP+, namely the RF gain control. It is fairly easy to do. It can be done from junk box parts and layed out as you like.

The big news is that it will be offered as a mod. for QRP+ owners to do themselves if they feel qualified. If you have built a kit radio and it worked, you can do this mod.

The factory will use this mod. in future issues of the QRP+ when the details are worked out. Tim is in the proccess of choosing a pot. for the RF gain adjustment. It will be mounted where the volume control/on/off, is located now. The on/ off switch will be located on the rear panel. The problem is that there is just not enough room on the front panel for a on/off/ RF GAIN control, so the power switch will be on the back panel.

I have a copy of the mod. schematic, and I will draw it out in Paintbrush, so that it can be sent as an attached file. I will also send it to the QRP-L home page for you all to look at. Just give me some time here, as I have a life outside of QRP. :)

de AA1IK N.E.-QRP-C. # 202 (Lead by example, It is better to)
 QRP-L member #95. (pull a string than it is to push it.)

Ernie Gregoire
RR 1 Box 221
Canaan, NH. 03741

New England QRP Club, information
available on request by sending me a
S.A.S.E. or via E-mail.

e-mail : GREGOIRE@ENDOR.COM
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "Bruce C. Williams" <n9jcv@wwa.com>
Subject: [9817] Randy and Kent I can send March copy
Message-ID: <Pine.BSD.3.92.960612220956.29373B-100000@shoga.wwa.com>

Randy and Kent,

I do have the March 96 issue of QRPP and can copy it for you. I will send it to each of you directly. Please let me know your snail mail address.

Bruce N9jcv Norcal # 359 QRP ARCI #8267

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: cjsterl@ix.netcom.com (Craig J. Sterling)
Subject: [9822] Show & Tell and TMPS Update
Message-ID: <199606131159.EAA05181@dfw-ix8.ix.netcom.com>

Gang,

Is anyone in the DC/MD/VA area interested in getting together for a QRP show-and-tell? I would be happy to coordinate. Pse contact me via E-Mail or telephone 202-537-5818 anytime. I d love to see and hear what everyone in the DC area is up to.

TNX,
Craig Sterling, AA3MD
Washington, D.C.

TMPS 1996
CRAIG J. STERLING, AA3MD QRP-L # 351
RIG: KNWD TS850 ANTENNA: CAROLINA WINDOM @ 85ft. NW/SE
Q s = 87 STATES = 31 DX = 13 CONFIRMED = 5
STATES: ME NH VT NJ NY MD PA AL FL GA KY NC
SC TN AR MS OK TX CA AZ WY MI OH IL IN WI CO
IA KS MN MO
DX: EW VE1-3 LZ G XE 9A HA VP9 DJ OZ EA OK I GM

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "J. Skalski" <jskalski@acsu.buffalo.edu>
Subject: [9862] SILENT KEY?
Message-ID: <Pine.GS0.3.93.960613222148.21624B-100000@destrier.acsu.buffalo.edu>

I have a question. This thought came to me when I read something about the new license types.

When a ham "bought the ranch" ; QST would list his call in the "SILENT KEYS" column.

What happens to the No-code guys?

BTW this is only meant to be humorous.

To quote Seinfeld "there's certainly nothing wrong with that" :-)

73,

Jim N2GO
The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381
jskalski@acsu.Buffalo.EDU

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: wa5whn@ix.netcom.com (Jay Miller)

Subject: [9829] Sporadic "E"/VHF
Message-ID: <199606131339.GAA13756@dfw-ix9.ix.netcom.com>

Dear Fellow QRP Enthusists,

Try the following URL;

<http://elf.gi.alaska.edu/>

{From the "CQ VHF", July, '96, page 52}

72...Jay, WA5WHN

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Stan Skelton <sskelton@cln.etc.bc.ca>
Subject: [9834] surface mount "Micronaut" kit has arrived :-)
Message-ID: <Pine.3.89.9606130729.A25482-01000000@sparky>

Hi All...well, the much anticipated "Micronaut Kit" from Sescom Inc. arrived yesterday...now I'm really scared! Some of the components are really tiny!...less than an eighth of an inch long, less than a sixteenth of an inch wide and less than a thirty-second of an inch thick!..To put that into perspective, I've seen sea salt at fancy restaurants with individual grains just about that size. What a great kit though, (despite the trepidations over the size, and after all, that's why I ordered it). It comes complete with aluminum and plexiglass case (1.8" x .6") and "both" sockets necessary to make it either a 40 or 80 meter QRPppp experimental transmitter for only \$14.95. I'll let you know after the weekend how the construction went.
btw...I have no financial interest in Sescom (or anything else for that matter, dangit.
TtFn....Stan T.M. VE7 SKT QRP-L #34

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [9856] TAC-1 Findings (Long)
Message-ID: <31C0B339.24C2@ix.netcom.com>

Hi Gang! (and Chuck, who I know is building a TAC-1)

I've just built a S & S Engineering TAC-1, and thought I'd lend my findings to you.

First off, diode D7, a 1N4001 is in series in the power lead as a polarity protection device, and is underrated for the 1.25 amps of transmit current draw. It gets HOT! I've replaced mine with a 3 amp device and it runs a lot cooler. I'm probably gonna put a 3 amp schottky power diode in there, such as a 1N5822 to lessen the forward voltage drop. This should help if running off of a battery when the volts start to drop. An alternative would be to use a jumper there, or a resistor fuse, and put the polarity protection in the power lead where there should be a fuse anyway.

The ARK30 I have has a 1N4001 diode across the 13.8v supply to ground so it isn't in the power lead causing a voltage drop of .7 to .8 volt, but it also has a PCB mounted fuse for protection. Right now I'm using 3 feet of lamp zip cord (18awg, 3 amp fused) to my AC 13.8v supply. Had to ream out the hole slightly in the coaxial plug to accomodate it.

Second, this is the second S&S kit I've had (the other is an ARK30) that had a low voltage zener at D23, a 1N4733A. Both of the originals were only around 4.7V on my DVM.

Got some new ones from the local Radio Shack, that were much better at 5.15v (motorola devices). I think the product detector works a little better now. I told Dick about this already.

I'm getting around 6 watts out into a 50 ohm dummy load, which is great, but not true

QRP" and it seems like a little much for the small heat sink on Q7. I've installed

molex pin sockets for Q6 and Q3 to allow me to select devices for optimizing the output.

The 2n3906's I had seemed to be a little soft for Q3, resulting in too much voltage drop

to the transmitter chain. Q4 and Q5 didn't seem as critical to the drive. With the molex

sockets, you could use a "hotter" pair at Q3 and Q6 when battery operated, or the

"weaker" pair if running off a good 13.8v AC supply. The "softer" transistors will still give 4-5 watts, and may be a better idea for longevity.

I looked at several 2n3906s before finding one that didn't have so much drop when ON during transmit. A 2n4403 or 2n2907 had much less ON resistance and gave better keying/output power. A couple of the 2n3906's I had on hand were nearly as good, so I think they vary a LOT in ON resistance. Finally found one that gave me 11.03 volts at Q3's collector. I can get as much as 9-10 watts out by using a 2n4403 at Q3 and a 2n2222 (good) or mps2222a (better) at Q6, but decided that was TOO much and not really true QRP, so I chickened out and settled for a good 2n3906 at Q3 and a good 2n3904 at Q6 for a solid 5-6 watts. The power is there if you want it, but Q7 might expire prematurely from all that drive. I could get 9-10 watts with the right combination. Needs a bigger heat sink with lower $\%C/Watt$. (Haven't found one yet that would fit ;-)

Had to add one turn to L4 to get the MAIN LOOP VCO going. It has 13 turns now, neatly grouped into three groups of 4 turns when seen from the top. The wire passes thru 13 times but it only looks like 12 full turns.

The LM7809s on this kit and the ARK30 were a little wimpy in output voltage, so I replaced them all with JRC 7809a's and got a nice 9.15v to 9.20v. The originals were cheap Korean KIA 7809Ps with 8.95v to 8.99v. This can make all the difference in the world when trimming C45 to get 36.4000 MHz at TP2. My low 9 volt supply couldn't bring D8, a MV209 varicap, low enough in frequency with the RIT centered. A second MV209 was no help either, and I tried several other 16.0000 xtals I had to no avail. The original xtal is a "watch" type in a miniature cylinder case.

I even checked the 1k resistors R30 and R39 to see if they were "unbalanced", but the most improvement came from boosting the 9 volt supply with a new 7809a. Your xtal may pull low enough with C45, but if it doesn't, here's where to look. A couple of 10ths of a volt improvement from 9.00 to 9.20 did the trick. Otherwise, it's not possible

to
calibrate the VCO to frequency correctly.

The LM78L05s seem to be better when it comes to rated 5v readings. Didn't change any.

A 100uF 10v electrolytic fits better at C14 and is adequately rated. The original 16v part supplied was a tight squeeze. Funny thing is, the parts list specifies a 10v part but a 16v cap was supplied. Check the junk box if you can find one.

I used "hot carrier diodes" for D15-D18, the double-balanced mixer in the front-end, instead of the supplied 1N4148s. The 1N5711s I had were much better matched in forward drop, and have less junction capacitance and less voltage drop. This should improve the mixer performance.

Spend some time adjusting T5,T6,T7 'cause there's a lot to be gained here for best bandpass characteristics and LO drive. Small movements in the windings position made large differences when you get it close. I used the tuning knob between 7.000 and 7.200 to evenly set the bandpass. It's only 1 click up or down to move to band edges.

I didn't get much improvement when adjusting the rcvr bandpass transformers, T12-T13, so either mine were either spot-on, or WAY-OFF! But the sensitivity seems quite good compared to my commercial HF big rig. Your mileage may vary.

Now for the GOOD stuff!

The keyer works really well, and the digital display of freq / speed is GREAT. It even comes on at power-up to 7.040 MHz and 12 wpm, which is only a few clicks of the tuning knob away from 20-25 wpm, where I usually operate. The digital display of keyer speed and frequency is nice for repeatability. The weight is even digitally adjustable from the tuning knob when placed in the "keyer" mode by the rear panel push button. This is integrated into the PIC microcontroller and is cheaper to buy with the kit than later, since it replaces the standard uP. Get it.

BNC antenna connector!

No relay!

Nice audio filter, seems better than the ARK30.

No 10 KHz whine at low headphone levels. Dick put a 4.7uF from pin 7 of the LM386 to

ground. I put a 10 uF tant. in my ARK30 to cure it. Just fits under the PCB.

Had no BCI images at my QTH in the evening. IMD is good.

Beautiful case, cabinet, packaging, as in all S & S products. The PCB is really a pretty

effort, with no jumpers or EFU's (engineering f***-ups), but it's a little tight in

places and requires careful assembly. Take your time building and enjoy. Not a kit for

first time builders. The silk screening is clear and the mask is nicely done. No wiring

except for a ribbon cable assembly to the front panel. It's a clean layout. You won't

want to put the cabinet on for a while so you can admire the workmanship.

Keyed waveform is well shaped, and the signal has a nice "ring" with no clicks when

monitored on my big rig.

NO DRIFT! None. It's synthesized.

Jacks for both paddles and straight jacket, I mean straight key! ;-) Works well with my

homebrew keyboard and Bencher paddles both attached.

Gripes:

No external speaker output jack, but my amplified speakers can go in the earphone jack.

There is a 100 ohm resistor in series there, but the LM386 can drive a speaker directly

adequately, and there is a PCB take-off point near the rear panel for a speaker but no

jack. Couldn't bring myself to drill another spare hole in the rear panel yet (one has

to be drilled for the keyer push button PB1, and there are two other spots labeled PB2, PB3, but they might have options later so I decided not to drill).

Now I have three rigs, each with different keyer connections to juggle when I change

from one to the other. 1. Phono jack (Heath) . 2. 1/8" phone jack (TAC-1). 3. 1/4" phone

jack (ARK30). :-(

I'm using plug adapters now, but I may build a switchbox so I don't plug, unplug,

etc.,
etc. :-@ grrrrr!

Summary:

For \$199.95 + 29.95 for the keyer purchased with the kit, it's a good value and very high quality. If you consider the competition, adding all that's necessary to equal this rig, it's a good buy. You won't be disappointed.

Standard disclaimer: I am not affiliated with S & S in any way, and received nothing for this review.

Gary, AB7MY

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: dolsonj@ix.netcom.com (James Dolson)
Subject: [9820] TenTec Argo 505 s/n23 value?
Message-ID: <199606131138.EAA25679@dfw-ix4.ix.netcom.com>

I've got the opportunity to buy a clean TenTec 505, serial # 00023, just one previous owner. They guy is asking \$375 but I could probably get him down a bit. I had a 509 years ago and loved it. I still have the matching TenTec 50watt amplifier (just one itty bitty scratch), but no rig to go with it.

Does the price sound right???

Tnx
Jim
WB8ZBD

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: DLShips@aol.com
Subject: [9824] Wanted - Micro 30 and converter board
Message-ID: <960613081139_216429200@emout19.mail.aol.com>

I'm looking for a Micro 30 board and the matching (NE602) 4 band converter board. The Micro 30 was a kit offered by "Small Parts Center" back in the late 80's. Tnx

de W3RDF/qrp

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: rheiss@tuba.aix.calpoly.edu
Subject: [9828] Re: 20m dx
Message-ID: <9606131327.AA39947@tuba.aix.calpoly.edu>

> 20m. It was good tonite. I started on 14060 and called CQ with no takers
[...]
>Al K0FRP

How about an SWL report? Al's CQ was 599 on the whip antenna of my DX400,
while I was hiking at the 2100 foot level of Cerro Alto, Los Padres
National Forest. WX was solid clouds below and clear above.

Reception was even better at the 2500 foot level. I plan to pack a rig or
two up here for Field Day. Good luck to all, I hope to work a bunch of you.

72, Rob K06KA Atascadero CA
rheiss@calpoly.edu

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: n5zgt@swcp.com (Brian Mileschosky)
Subject: [9830] Re: 20m dx
Message-ID: <199606131402.IAA19555@kitsune.swcp.com>

I snagged 10 new countries on 20 this week, all during the night.
(Macedonia, Estonia, Norfolk Island, St Lucia Island, Guantanamo Bay, San
Andres Island, Guam, New Caldonia, India, Lithuania). Good propogation
everywhere! These kind of conditions happen every year at this time of the
year. Great Gray-Line propogation! 2 years ago was the best. I worked FH5CB
on Mayotte Island (You can't get any more "on the other side of the world"
from my QTH than that!) with 100 watts on a dipole!

Sorry this really isn't QRP related, but everybody can make it that way!
Lots of DX on 20 CW. Keep listening and good DX.

72,
Brian, N5ZGT

At 01:18 AM 6/13/96 -0400, AlK0FRP@aol.com wrote:

>Hi All
>Watched the big celebration for the Colorado Avalanch (Stanley Cup), then
>tuned

>20m. It was good tonite. I started on 14060 and called CQ with no takers
>moved to 14035 and snagged an OH7 and a UA6, then KC7DQV, AZ, called off the
>back of the beam. Then ZL2JK called, went to a half watt, still good copy. But
>a V beam on his end and a 4el mono on my end helps. Then ZL1CH called me.
>Good nite on 20M, no new ones but its always fun when condx are good. Hope
>all this hold for Field Day weekend. Hope 6m hold out.

>

>

>73/72

>

>A1 K0FRP

>

>

>

Boy Scouts of America
JASM -Troop 41
Albuquerque, N.M.
O.A. Lodge 66 <-W-W-W-<<

Amateur Radio - N5ZGT
ARRL QRP: NorCal# 1700
Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
Internet: n5zgt@swcp.com

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: kd7s@valleynet.com (Bill Jones)
Subject: [9815] Re:40-9er contest
Message-ID: <199606130442.VAA09286@valleynet.com>

Whoever came up with the idea of having a 40-9er contest is to be
congratulated. But, let's not wait for better conditions. I plan to use
mine (at least for a little while) during Field Day. I only need another
forty-one states for my 40-9er W.A.S. award.

=====
Bill Jones - KD7S <><
QRP-L Member #85
Sanger, California
Reply to kd7s@valleynet.com
=====

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: N5EM@aol.com
Subject: [9838] Re: 49-er Contest

Message-ID: <960613121646_555497864@emout09.mail.aol.com>

In a message dated 96-06-13 00:03:00 EDT, you write:

>

>How 'bout extra points for an official Altoids enclosure?

Oh give me a break! How about extra points for no enclosure and only partially finished? Multiplier for each part you remove from the circuit? That's one way to get the smallest possible component count. Divide your score by the total number of parts used :-)

Now there's a concept for RAS (Radio Adventure Society to youse non-members). Divide raw score by number of components in the rig and multiply by the weight of the total station in oz.

This stuff is fun.

72

Ed

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: mizrahi@svlhp8.scs.philips.com
Subject: [9855] Re: 49-er Contest
Message-ID: <9606131909.AA10194@svln20.scs.philips.com>

AA0SM wrote:

> >How 'bout extra points for an official Altoids enclosure?

and N5EM replied:

> Oh give me a break! How about extra points for no enclosure and only
> partially finished? Multiplier for each part you remove from the circuit?

Now that's an interesting thought... reminds me of the "chopped" Merc's, those with two inch windows!

So, here is the challenge, step-by-step:

- 1) Take an Altoids can, remove the lid and save it for the final assembly.
- 2) Chop 1/8" (or more) from the height somewhere in the middle. Weld the two parts together.
- 3) Polish the thing until it looks better than new.
- 4) Follow with seven coats of shocking pearl pink applied in one week intervals and, of corse, hand-rubbed to perfection.
- 5) Add flames to suit your taste.
- 6) Reattach the lid with the original Altoids colors to the new chopped and repainted bottom, as a proof that it really was an original Altoids can.

To figure out your contest score, divide your total contact points by the ratio of the new reduced height vs. the original height, rounded off to 1/1000". Extra points are awarded also for operating the 40-9er with mints in the can! Multiply your previous score by the number of mints you squeezed in.

Oh, I forgot. N5EM very rightfully said:

> This stuff is fun.
I couldn't agree more, Ed!

72 ORI

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: rnygren@epix.net (Bob Nygren)
Subject: [9845] RE: A great resource, the NA5N book
Message-ID: <Chameleon.960613121815.rnygren@epix.net>

Stuart,

Ditto on your remarks! But don't forget the contribution of Rich, W0HEP, in the form of the "QRP Yellow Pages", another fine addition to the reference library.

I was able to get my copy signed by Paul at FDI, but forgot to get it signed by Rich also. :-(Hey Rich, can I bring it back next year?!

73, Bob WA3YON <rnygren@epix.net>

You wrote:

>The QRP homebrewer's book by Paul Harden was a delight to find at Ham Com.
But
>it is an ideal educational text for the new ham, or even those new to
>electronic components in general.
>
>Thanks to Chuck Adams and Paul for arranging a shipment of them so those of
us
>in TX could enjoy them even if we did not make Dayton.
>
>The cover of the book is the first interesting part. Full color, and a very
>neat ham shack, but wait---turn to the back cover--you see the real state of
>QRP building! ALSO in full color! Nice photos!
>
>The book is spiral bound in metal thus it lies flat on the bench, a good
idea
>for a construction reference. But more than that, it is a good education in

>the basics of various components, popular chips and transistors, reviews of
>vaious kit rigs, and the tutorial in four parts of how a transceiver works,
>which takes you stage by stage and component by component thru the typical
>mixer type rig. Really groundbreaking is having not only the typical signal
>levels, but spectrum photos of what the signals look like at various stages.
>
>The organization of the book is first rate. The inclusion of so much
>reference material in such a compact size book, but very legible and
readable
>is amazing. This will eclipse what has traditionally been the role of ARRL
>Radio Amateur's Handbook, and not only in the QRP world, but for anyone
trying
>to study or teach component level design and repair.
>
>The resource pages known as the yellow pages completes the useful and
>necessary parts of an all around useful amateur radio classic that I am sure
>this will become. Vendors information on parts and kits, and accessories
are
>included, and the future editions promise even more of an achievement.
>
>Good Work, Paul!
>
>I believe the ordering info has already been posted, so consult the list
>archives or call 5 Watt Press for more info.
>
>72, Stuart K5KVH
>rohre@arlut.utexas.edu
>
>
>

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: pcw12@ix.netcom.com (Phil Wheeler)
Subject: [9866] Re: ARC 5 (many fond memories)
Message-ID: <199606140350.UAA23659@dfw-ix11.ix.netcom.com>

You wrote:

>
>In a message dated 96-06-12 13:47:13 EDT, pharden@aoc.nrao.edu (Paul
Harden)
>writes:
>
>>Any bonus points for an original A/N ARC-5? (WW-II era vacuum tube
>>transmitter about the size of a loaf of bread, for you newer fellas).

>
>You woke me up...Thanks. I converted many ARC 5's in the early 50's>
In fact
>I have two of them in my utility shed and was considering pulling them
out.
>1625's can quickly take you out of the qrp scene. Hi.
>
>Now if you can say the name ANGR-9 (angry 9) you'll wake this old
dawg to
>the point where he gets up on all fours and stretches..... I can
recall
>sitting in the back of a jeep creeping along the border between
>Czechoslovakia and W. Germany, banging CQ's with a J-37 signing my
newly
>earned call "de DL4AV" (sometime in 53) hi hi The angry 9 was more
of a
>qrp rig..
>
>72's de W3RDF/qrp
>
>
>

I can echo that. My primary station from 1953 to 1962 was a
(highly-modified....80/40/20) ARC-5 transmitter and ARC-5 receivers.

Stored them with a friend(?) when I went off to do more graduate work
in 1963. When I returned, he was gone and so was my ham station
(including my BC-band coverage ARC-r rcvr ... BC-453?).

Oh welll...much better station now, but I do feel the loss (like the
HW-8 I used as a DL7 in 1977 which has somehow vanished!).

72....Phil w7uox

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: jgann@mindspring.com (Alvin G. Gann)
Subject: [9860] Re: CW/Field Day/Finally Rain/Sporadic E
Message-ID: <199606140126.VAA18371@borg.mindspring.com>

> With the Group purchase of the new OHR 100 kits for 17 meters, does
>this mean a repeat performance of the TMPs, except for 17 meters in the
>future ?

I certainly hope so, preferrably after the sun gets a little more spotted.

72 -- Jerry W1UI EM74ix 34 17' N 85 28' W QRP-PLUS random loop ant.
W1UI Tmps 1996 Qs=018 States=12 Confirmed=07 DX=02
LA PA NJ WI MN NC KY FL IN TN WA MI

W PY HC

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: herr@ridgecrest.ca.us (Michael Herr)
Subject: [9826] RE: Cyanide gas
Message-ID: <v01530501ade6aa4abc5e@[199.120.150.55]>

>My "Micronaut" kit hasn't yet arrived but I have been doing a little
>research into construction techniques...One posting I have seen suggested
>using crazy glue to hold the itsy-bitsy things in place prior to
>soldering them... a local tech guy just about had a fit when I suggested
>this to him...it seems some crazy glues have a chemical composition that
>releases significant quantities of CYANIDE gas when heated....I was told
>that it would really mess up the kit if I was to go into convulsions and
>die, thereby knocking the tiny parts around the room rendering them lost
>to whomever would like to take over and finish it.
>btw...please please please start another list for the CW debate?
>TtFn....Stan T.M. VE7 SKT QRP-L #34

Stan,

Yea, it sure does, especially if you use an accelerator with it. But,
typically the amounts for gluing a SMT on is so small, or at least should
be, that this shouldn't cause a problem. Also, at least one manufacture of
CA's for the model airplane hobby a "User Friendly, Oderless", UFO,
version. BTW, model airplane builders use CA glues in large quantities with
out problems.

72

Mike WA6ARA

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [9836] RE: Cyanide gas
Message-ID: <01BB5916.A2A203E0@muenzlerk.uthscsa.edu>

On Thursday, June 13, 1996 7:46 AM, Michael Herr[SMTP:herr@ridgecrest.ca.us]
wrote:

>
>Stan,
> Yea, it sure does, especially if you use an accelerator with it. But,
>typically the amounts for gluing a SMT on is so small, or at least should
>be, that this shouldn't cause a problem. Also, at least one manufacture of
>CA's for the model airplane hobby a "User Friendly, Oderless", UFO,
>version. BTW, model airplane builders use CA glues in large quantities with
>out problems.

>72

>Mike WA6ARA

>

The only real problems are caused, as you stated, by heating the glue to the point of vaporization. The vapors are EXTREMELY irritating to the eyes. This can also cause problems with your kit (or lap) when you drop your soldering iron. Breathing the vapors can cause minor nose irritation but keep it out of your eyes. The "cyanide" gas that is released is a poly-cyanic gas that is relatively harmless other than it tends to be very good at stimulating the nerves. It doesn't have the same capability as ionic-cyanide such as Hydrogen Cyanide or Potassium Cyanide both of which block a cell's ability to use Oxygen. Since the nerves are extremely sensitive to Oxygen depletion they die first. Then you die because you stop breathing, heart stops, etc.

Kevin, WB5RUE

muenzlerk@uthscsa.edu

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996

From: n5zgt@swcp.com (Brian Mileschosky)

Subject: [9846] Re: Field Day Hints

Message-ID: <199606132042.0AA16580@kitsune.swcp.com>

At 06:14 PM 6/13/96 PDT, Bob Nygren wrote:

>Hi Gang,

> After many years of operating Field Day with the local club,
>my bro' Dave, KE3OA, and I will be trying our first QRP F D. The
>batteries are pretty much charged and the plans set. We'll be about
>5 air miles from the club site, so I don't think interference will be a
>problem. I've read the exploits of the better known groups. My question
>is: Does anyone have any advice/hints/kinks which will help make this
>first QRP field day pleasurable.

> Any thoughts are appreciated!

>

>73, Bob WA3YON <rnygren@epix.net> ** KE30A 1B EPA **

>

The best piece of advice I can give you is...

HAVE FUN!!!

72,

Brian, N5ZGT

Boy Scouts of America
JASM -Troop 41
Albuquerque, N.M.
O.A. Lodge 66 <-W-W-W-<<

Amateur Radio - N5ZGT
ARRL QRP: NorCal# 1700
Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
Internet: n5zgt@swcp.com

From owner-qrp-l@Lehigh.EDU Thu Jun 13 23:09:58 1996

From: kd7s@valleynet.com (Bill Jones)

Subject: [9857] Re: Field Day Hints

Message-ID: <199606140048.RAA04534@valleynet.com>

Bob

I have operated FD for several years using nothing more than an HW-8. I don't know what rig(s) you will be using but the very best advice I can give you is to make absolutely sure you're on the same frequency as the station you're calling. Many operators use very narrow filters to avoid as much QRM as possible and if you're signal doesn't fall with his (or her) filter *window* you won't make the contact. The first year I went out with my HW-8 I had a real problem making contacts. After I got home, I discovered my transmitter offset was well over 1 kHz instead of the more nominal 600-700 Hz. The following year I more than doubled my previous score because I was on frequency.

---stuff deleted---

> My question is: Does anyone have any advice/hints/kinks which will help make this

>first QRP field day pleasurable.

> Any thoughts are appreciated!

=====

Bill Jones - KD7S <><

QRP-L Member #85

Sanger, California

Reply to kd7s@valleynet.com

=====

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "Harvey D. D. Hetland" <HDHETLAND@paccd.cc.ca.us>
Subject: [9859] Re: Field Day Hints
Message-ID: <3F95E8869D4@manage.paccd.cc.ca.us>

Bill, KD7S, suggested

> I have operated FD for several years using nothing more than an HW-8. I
> don't know what rig(s) you will be using but the very best advice I can give
> you is to make absolutely sure you're on the same frequency as the station
> you're calling.

Amen! Along the same line use your RIT to look for the stations
that are off frequency. During the QRP to the Field this spring
many of the stations I worked were off frequency (both above and
below). At the end of each CQ or QSO rock the RIT both sides of
center. Keep your CQs short so folks do not become impatient and
have a chance to work you.

73, Harvey, N6MM

TMPS 96: QSOs=108, WAS=36, DXCC=020 OHR 400, dipole & not teaching
summer school (which sure helps).

States: HI AK OR WA NY CO SD CT WY CA KS LA OH GA PA MD AL NM FL OK
AZ WI KY TX ID NV IL IN WV TN MI NE MN NC NJ UT

DXCC: C2 JW KH6 JA KL7 A3 W 5W VE PJ2 T30 VK9N ZL FK8 OH OA VK FG LU
C6A

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Bob Hightower <ki7mn@user1.dancris.com>
Subject: [9865] Re: Field Day Hints
Message-ID: <199606140329.UAA19649@dancris.com>

At 06:17 PM 6/13/96 PST, you wrote:

>TMPS 96: QSOs=108, WAS=36, DXCC=020 OHR 400, dipole & not teaching
> summer school (which sure helps).

>States: HI AK OR WA NY CO SD CT WY CA KS LA OH GA PA MD AL NM FL OK
> AZ WI KY TX ID NV IL IN WV TN MI NE MN NC NJ UT

>DXCC: C2 JW KH6 JA KL7 A3 W 5W VE PJ2 T30 VK9N ZL FK8 OH OA VK FG LU
> C6A

>

>

Harvey, you HAVE to get a life :^). Really, very impressive.
73,

Bob NorCal #1228, ARCI #8918, Qrp-1 #271, CQC 274

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "Paul R. Valko" <prvalko@oakland.edu>
Subject: [9867] Re: Field Day Hints
Message-ID: <Pine.OSF.3.91.960613235036.6015B-100000@vela.acs.oakland.edu>

On Thu, 13 Jun 1996, Bob Nygren wrote:

> Does anyone have any advice/hints/kinks which will help make this
> first QRP field day pleasurable.

Hmmmmmm. ANY advice? Sure, bring LOTS of cold beer.

73! =paul= wb8zjl

Ob-QRP: (Been a while since we've seen an Ob-QRP!) I pulled out my beloved 49er (as seen on <http://www.oakland.edu/~prvalko>) and managed to work KA3WTF/QRP in PA. He SURE was impressed to work a 200mw station. He'd be MORE impressed if he had any idea of the BC QRM that we suffer through on 49ers!

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Jack Ponton <jwp@chemeng.ed.ac.uk>
Subject: [9837] Re: GQRP - Inductance Calculation?
Message-ID: <199606131544.QAA16069@mhcr.chemeng.ed.ac.uk>

Dave,

You seem to want to get on 73kHz the hard way!

Here's what I'd try first...

a) Normal LW ferrite rod tunes down to 150kHz with a 500pF variable. I calculate that it should thus be about 2.252mH. This agrees with a design I saw many years ago for a 150kHz 'wired radio' TX which used a standard 2.5mH choke as tuned

inductor.

With the usual formula, I calculate that you need 2112pF to resonate this at 73kHz.

b) If no handy LW coil is available, I wouldn't be much inclined to wind one for this sort of frequency. Use instead a Toko 10RB inductor, lots of values available in the range 1mH upwards. I think Cirkit still do these at less than a pound.

c) If you really want to make vintage style LF coils, I think you'll have to wind them in the mH range. A big C and a small L as you propose is, as I recall, not good for selectivity. I remember seeing photos of coils from that era. I think you'll be looking at 3 inch diameter and about 200 turns.

d) For the oscillator, why have an inductor anyway? Just use a crystal and a cmos chip? We're practically talking about digital watch frequencies (32kHz)!

e) Have you thought about a software DDS using a PC? What's the upper limit of a Soundblaster card...?

Good luck! Do please let me know how you get on.

72/3,

Jack, gm0rww

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [9841] Re: GQRP - Inductance Calculation?
Message-ID: <Roam.3.0.834686867.20075.myers@bigboy>

> a) Normal LW ferrite rod tunes down to 150kHz with a 500pF
> variable. I calculate that it should thus be about 2.252mH.
> This agrees with a design I saw many years ago for a 150kHz
> 'wired radio' TX which used a standard 2.5mH choke as tuned
> inductor.

I'll bet the Q of the choke is pretty low, which is probably OK if the choke isn't in an oscillator tank, as an output tuned circuit for a crystal, it is probably OK.

> b) If no handy LW coil is available, I wouldn't be much inclined
> to wind one for this sort of frequency. Use instead a Toko
> 10RB inductor, lots of values available in the range 1mH upwards.
> I think Cirkit still do these at less than a pound.

Again, beware of the low Q in these chokes. This will increase the
insertion loss of filters and increase the noise of oscillators.

> d) For the oscillator, why have an inductor anyway? Just use
> a crystal and a cmos chip? We're practically talking about
> digital watch frequencies (32kHz)!

You'll still need some LC circuits for this to filter off the
harmonics of a CMOS output and match the power amplifier (1W, right?).

> e) Have you thought about a software DDS using a PC? What's the
> upper limit of a Soundblaster card...?

You might be able to build a DDS for 73KHz really cheaply using
just EPROMs and a sequential counter and tune it by tweaking the
counter clock rate...

You'll still need some LCs for the PA, though.

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Jack Ponton <jwp@chemeng.ed.ac.uk>
Subject: [9843] Re: GQRP - Inductance Calculation?
Message-ID: <199606131759.SAA17208@mh.or.chemeng.ed.ac.uk>

-> > b) If no handy LW coil is available, I wouldn't be much inclined
-> > to wind one for this sort of frequency. Use instead a Toko
-> > 10RB inductor, lots of values available in the range 1mH upwards.
-> > I think Cirkit still do these at less than a pound.
->
-> Again, beware of the low Q in these chokes. This will increase the
-> insertion loss of filters and increase the noise of oscillators.
->

Actually, 3.3mH and above are given as having a Q of 100, which isn't bad.
Certainly a lot better than the old fashioned 4 pile 2.5mH job which was
used with the early wired radio I mentioned.

-> You'll still need some LC circuits for this to filter off the

-> harmonics of a CMOS output and match the power amplifier (1W, right?).

....

->

-> You'll still need some LCs for the PA, though.

->

Yes indeed, and these chokes have a max current (about 50mA for the 3.3mH) which would seem to keep them firmly in the milliwatt range.

I also suspect that standard ferrite rod windings won't be too happy at the 1W level either.

Hmmm, perhaps big Marconi-style inductors will be making a comeback..

Dave, did anyone tell you to try the ARRL handbook for ferrites data? I seem to remember there was quite a lot there, not all of it in the obvious place.

72/3

Jack

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996

From: Kevin Muenzler <muenzlerk@uthscsa.edu>

Subject: [9839] RE: Inductance Calculation?

Message-ID: <01BB591A.3B326200@muenzlerk.uthscsa.edu>

If you know the permeability of your toroids you can calculate the number of turns pretty

easily. If you don't know the you will probably have to experiment. I would suggest

building a simple oscillator using your 47000pf capacitor and an inductor that you make. See what frequency it oscillates on and then tune the inductor up or down as needed. I've had to do this on occasion and it usually results in coils that are pretty close.

You can calculate the number of turns required if you know A(L) value for your toroid by:

$$\text{turns} = 100 * \sqrt{\text{Luh} / A(L)}$$

where Luh is the inductance in microhenrys (sorry, don't have a Greek mu on my keyboard)

73,
Kevin, WB5RUE

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: WD6BOR@aol.com
Subject: [9842] Re: Installing ground rods
Message-ID: <960613133538_216612974@emout13.mail.aol.com>

Peter and the group,

Driving the ground rods at an angle and with a tool is definitely the easy way to install them. It may be worth the cost to rent an electric demolition hammer and drive them directly with that. The hammers will usually drive a 1/2 or 5/8" rod directly with the bit socket (without a special attachment). Ask around. A fellow ham might also be a building contractor and have a hammer that you could borrow for an hour. Actual installation of the ground rod will normally be less than five minutes using this method.

Darrel, WD6BOR

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: n6mve@juno.com (mike wood)
Subject: [9840] Re: model airplane builders
Message-ID: <19960613.093115.7327.13.N6MVE@juno.com>

So thats the secret, No wonder my planes never fly! From now on, no more soldering iron on the balsa wood...

73, mike N6MVe
On Thu, 13 Jun 1996 10:07:11 -0500 ccashion@spdmail.spd.dsccc.com
(Charles Cashion) writes:
>herr@ridgecrest.ca.us (Michael Herr) wrote >
>
> mh> BTW, model airplane builders use CA glues
> mh> in large quantities with out problems.
> mh> 72
> mh> Mike WA6ARA
>
>YES! But after glueing little pieces of balsa togather,
> they usually frown on heating them to the melting
> point of solder.

>
>72s, 73s, whatever it takes,
>Charles Cashion
>AC5GT
>--
>
>

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Yin Lung Shih <ylshih@alumnae.caltech.edu>
Subject: [9848] Re: Need a BIG Favor
Message-ID: <199606132054.NAA24396@alumnae.caltech.edu>

Uh... Make that 3?? I'm also trying to figure out how to get a March '96. Have the bound copies through December 95 and I am supposedly signed up now for the balance, but I'm missing that one issue.

Yin Shih, K06VY
ylshih@alumnae.caltech.edu

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [9851] Re: QRP "Afterburner"
Message-ID: <Roam.3.0.834707507.30867.myers@bigboy>

> OK, all you guys and gals looking for a little more "umph" for your QRP rigs
> (the following from a recent ARRL DX Bulletin [#29 dated 6/13/96]):

>
> GOOD THINGS IN A SMALL PACKAGE. A recent DXpedition provided
> important field, or perhaps more appropriately stated, island
> testing of a new amplifier design. The brainchild of two amateur
> radio operators, the amplifier uses two MRF154 power MOSFETs and
> requires only 12 watts drive for 1KW output. A standard airline
> cabin case, which is carry-on luggage size, housed the whopping 16
> pounds of equipment comprised of an FT-900 transceiver, the custom
> amp and advanced switching power supply.

>
> Wonder what it puts out when driven by the FT-900's full output??... :-)

Heh-heh... the answer is almost certainly....

nothing!! Except the cries of the owner when he/she orders two more MRF154s, which are pretty expensive....

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: "John Kirk, VE6XT" <jakirk@freenet.calgary.ab.ca>
Subject: [9854] Re: QRP "Afterburner"
Message-ID: <Pine.A32.3.92.960613174434.50458B-100000@srv1.freenet.calgary.ab.ca>

Actually, this amp was featured a couple of years ago in QST, and also in some app notes from Motorola. It's not sci-fi! I wouldn't be surprised if Communications Concepts has it kitted already.

72
John

From owner-qrp-1@Lehigh.EDU Thu Jun 13 23:09:58 1996
From: Yin Lung Shih <ylshih@alumni.caltech.edu>
Subject: [9858] Re: QRP "Afterburner"
Message-ID: <199606140108.SAA05142@alumnae.caltech.edu>

I recently saw a demonstration of a new Class-E switching amp, designed at Caltech, which was intended to be driven by a NorCal 40-A. With 2-3 Watts in, it would put out about 250 Watts out. Efficiency was 97%, component count (not counting switching power supply) was about 7 parts, size was about a Walkman.

Yin Shih, K06VY